

ABSTRACT OF THE DISCLOSURE

An automatic method for soil sampling and analysis is provided using a robotic vehicle. The vehicle includes a ground drive system for moving the robot over the field. A control unit controls the steering and location of the robot. A tool package on the robot has one or more probes for taking soil samples, which are conveyed to a miniature lab on the robot for analyzing the soil sample. A processor generates data from the soil analysis, and the data is transmitted to a remote site for storage and later use. The processor includes software for moving the robot, sampling the soil at desired targets, analyzing the soil, and communicating the data to the remote site.